

09/700187

Fig. 1

AAGCTTAAAGGCAAGGGAAAGACAACAATTCCAAAATATAAAAACCTCTAAAGAATGATTTATTCTTATCTTCATAAAATAACTTTC -2040  
 CTATTCACAAACACATCAAAGTTATGTGATTCATCTTAAATTATCTGATAATATAATTGTATATTCAATAATTCTACATAATTGTG -1950  
 TTATATGAATATTGTAGGTAAGGAACTAAGAATAACCTCCGAAACATCAAAGTCAGAAACCTCTGTAACTCTTCAGTTGAAACG -1860  
 AGAAGGAAGTGGACAAACAGAAAACAGTTCCCCACTTAACCTCTGGTTGGGTGAGGACTTCCTTACAATTTAACTCTAAGGA -1770  
 AATACATTAGAACACTCTAGATGGGTGATTAGCTCATATTAAAGTAAATAATACCCACTTCAGGTTTTGTTGTTG -1680  
 CAGTAGATGATAAGATGGTCACTTCTCAAGGGCTTATGCAAAAGACATAAGTCATATACTCCACCAAGATTGCTTACATCTAACCA -1590  
 AGTTAATGAATTAACTTCGAAACAAATTCTACCAAGGAAGTTATGCACATTCTAATGTATTATAGAATTGA -1500  
 TACATGTTCTGTTACAGATTAGAATTGGATTCTCATCCTACACTGGTGAGGAAATTTCAGCTCAACCTCAGTAAT -1410  
 CAGGGTCTCTCAAACCTACACTGGTGAGTGAAGATTATGGACGTCAACCTAGCAATATGAATCCCTCCAAGATCTTACACT -1320  
 TATCTGAGTGAGAATTGGTCTCGACCTCAACAGATAGATTGATGGTCATCACAGGGGAAGCATTACATGGTCAAGATTTC -1230  
ACCCAAACAAAGTGAAGAGAGACATCACATCAACCAAAACTTAAAGGTGATAGGTGATAGGTTCTCTTAACTTATAAGTGTCAACCTC -1140

↔

CACTTCTAAGCAATGTTGACTTAAAGACTCACACTTATTCACACATAACTCACACTGTTTATCAACAACTCTCCCCACAAGTGTG -1050  
 AGTCATTCGCTATGTCCTCAAGGGAATCTCTTCATCGCATGCTTACCGTTGTTGACATACATCTTACTCGTCAATGGGAC -960  
 TTCATGGGACACGCTGCCGACCACTGCAAGAAGACTTGTACACAAGGAGTCGGCTCTACTCGAACAGACTCTGATACCATT -870  
 AATAGATCACTTGAATGGATATCATTACATACTATCAAACATTACGTAAGAGATAAAAAATTCAACCAAAACATGAGAGAGACATA -780  
 CATCTCTTATTATTAATAAAATGAAAGAAAATAGTAAAGTAACACATAATTGATAAAATTATTACTAAACCTTTC -690

12bp element      93 mer

TAGTACTGTTAATCATGTCGAGGATTCACAGTAAATAAGAAACGAGTAGCCAAACAAAAGTGATAATTGTTGAGGGTGTGATCTT -600  
 TGCGGTGCAAAACATGAAACCCCAACCTGTGATATTGTCGACTGCTCGCTGCTACATTGAAATTAAATGATTTCTTATAACG -510  
 TTGCTATGCGTATTACCCATGGTCACTAGAATTGACAATGAAATTAAATATATCTGTCATGTTGTTGAGGGTGTGATCTT -420  
 GTATCGTAATGGTAGGACATACTCGTACACAATTATCATCGTCAACTCGTCAATGTTCTTCCATGAATTC -330  
 ACATTGCTAAAGAAAATTACCACTTAAATGTTATCCCTGACACATTACATCAATTAAACATTTACATTGAAAACA -240  
 CATACATTAACATCAATTGTTGCAATTTCACAAACAAACACTTAAATGTTGAAATTGTTGAAATTGACAATTTCACAA -150  
 TATCCATGCTCAACACTCAATAATTCAACATTCCATGCAAAACATCACACATTGTTGAAACTTGTGAAATTGTTGATTTGATTAATCTAAT -60

TATA box      ↓ transcriptional start site

AAAAGCAATAATGATACTAAACAATATCACCATATATGTTATGATAATGATGCAACATAACTTAAATTGTTAAGGCTAAAGCATTAA 31  
 AGCGAGACAACTCTTAAACACCGGTAATTCAACACCGTTGTCGAGGTTCATGTTCTCCAACTCTTCTTCTTACTTT 121  
 ATTTATTCCTCTACTTACCTTCTACTAATATACATCTCTGAACTCTTGTGACAAGAAAATGACCAAAAGAACAT 211

1 M N Q E M

AATGAGTAGAAGCTGAAAGCTTCAAGAAAAAAATAGATTATGTTAAGGTTGCGTGTGGTGGATTCTGAGTAGAAAACCTAA 301  
 6 N G V E A E K L Q E K I D Y V F K V V V I G D S A V G K T Q  
 ATATTGTCGAGGTTTACAAAGAATGAGTTCTGTTGACTCAAACATTGTCGAGGTTCAAAACTGTCACATTAAAT 391

36 I L S R F T K N E F C F D S K S T I G V E F Q T K T V T I N

▼

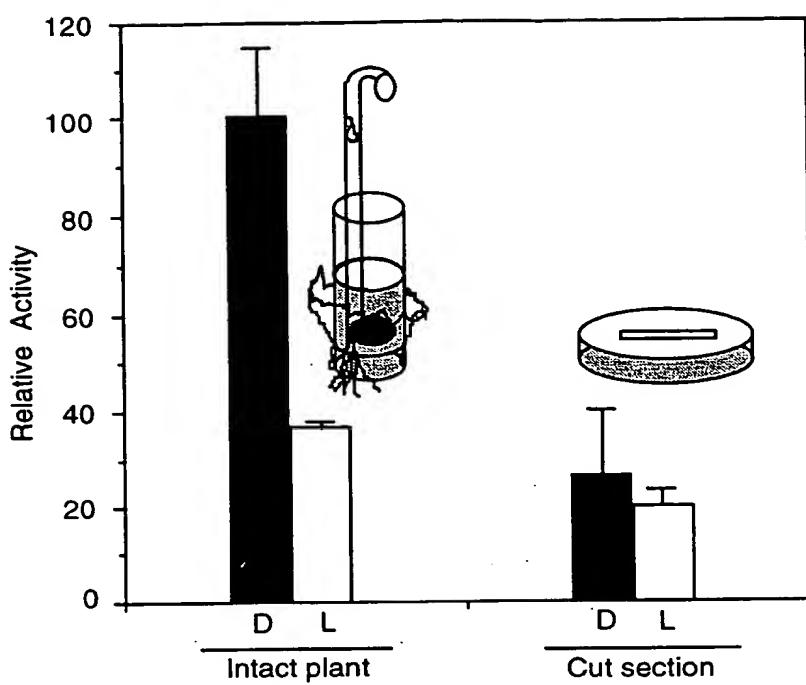
GGTAACACTCATCAAAGCTCAGATCTGGGACTCTGCTGGCAAGAAAGGTTCTTCTCTCTATAATCTGAATATATATTACT 481  
 66 G K L I K A Q I W D T A G Q E R  
 TACATTGTTGGAATAACATCTGCATCTGCAATCTGCAACACCGACATCTCTAAAGGAGATTGTCTGTCACAGATACTA 571

▼

TGATTATGCTGATTATTATTTCAGGTAGAGCGGTGACAAGTCACATAGAGGAGCATTAGGGCCATGCTAGTCTACGACA 661  
 82 Y R A V T S A Y Y R G A L G A M L V Y D I  
 TAACTAAAGACAAACATTGATCATGTTGACTGTTGAGGAACTGAGATCACACGCTGACGGTTCGATCGTCATCATGTTAATTG 751  
 103 T K R Q T F D H V A R W V E E L R S H A D G S I V I M L I G  
 GTAACAAAGGTGATCTGTTGACCAAGAGGTGACAGACTGAAGATGCGTTGAGTTGAGGGATCAGGGTCTTTCTCAGAAA 841  
 133 N K G D L V D Q R G V Q T E D A V E F A E D Q G L F F S E T  
 CCTCTGCTTCTGTTGAAATGTGAACCTGCTTCTCAAGTTGCTCAAGAGGATAATAAGGTTGTTCTAAAGGTCTTGGAAAT 931  
 163 S A F S G E N V N S A F L K L L Q E I N K V V S K R S L E C  
 GTAATAATGGGATTAAGGGAAATGGTAATCATGATGTTGCAAGGACTTAAAGGGAGAAAATTGATATAATTCTGCTTCTGAATTGGAAAT 1021  
 193 N N G I K G N G N H D V A A L K G E K I D I I S A S E L E I  
 TTAGTGAATCAAGAAATTGCAATTGATGTTGTTGATCTAAACAAAGAGTCAAAGTATATATTACAAAAAAATCATTCAATGTGA 1111  
 223 S E I K K L H S C S C  
 TCAGAATTGAAGAGCTTACTTATTTGTTCTGTTGGTGAATTACAGTAATGTTTACATTGTTAGATCTAATTCTTCT 1201  
 CCTTGATCTTTTATTTAAGATTGAGGTTAAATGTTGCTAGTTGTTGCTAATTATATTAAATTTAAAGCTT 1291  
 GATATCGAATTCTGCAAGCCC 1312

Fig. 2

a)



b)

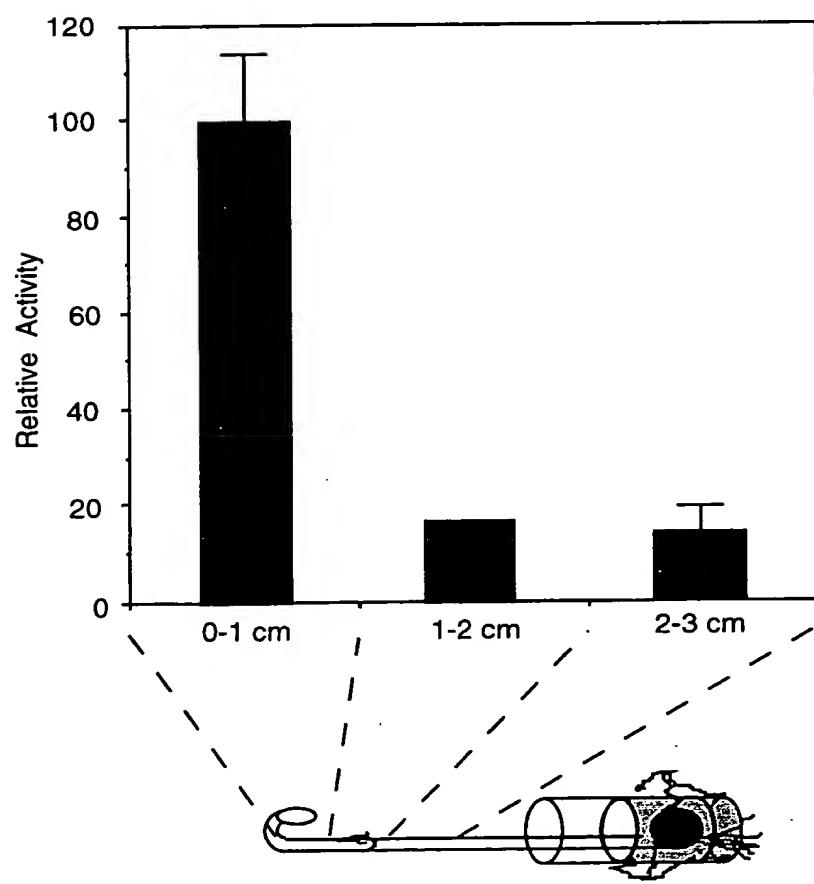
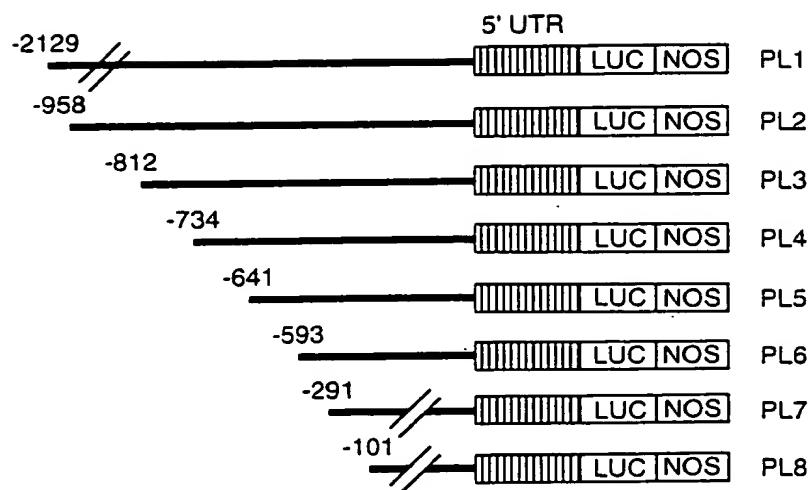
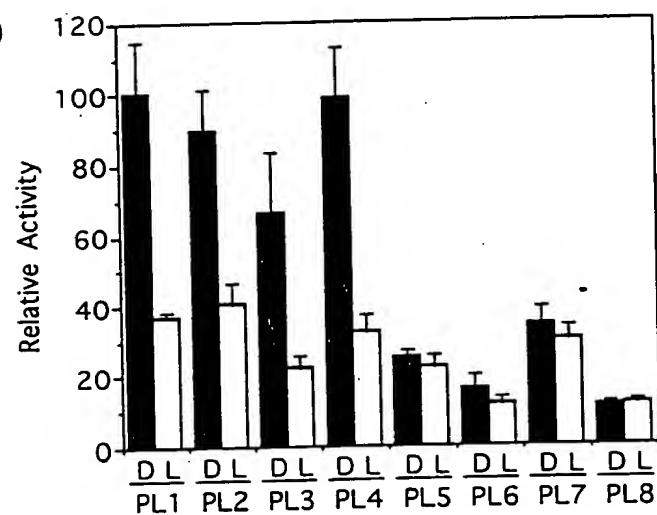


Fig. 3

a)



b)



c)

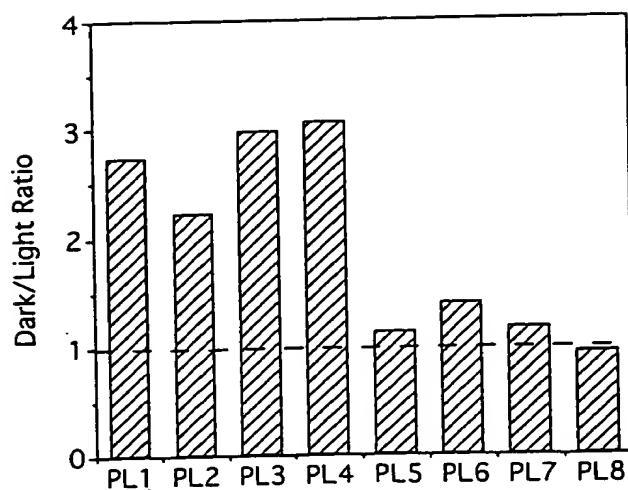
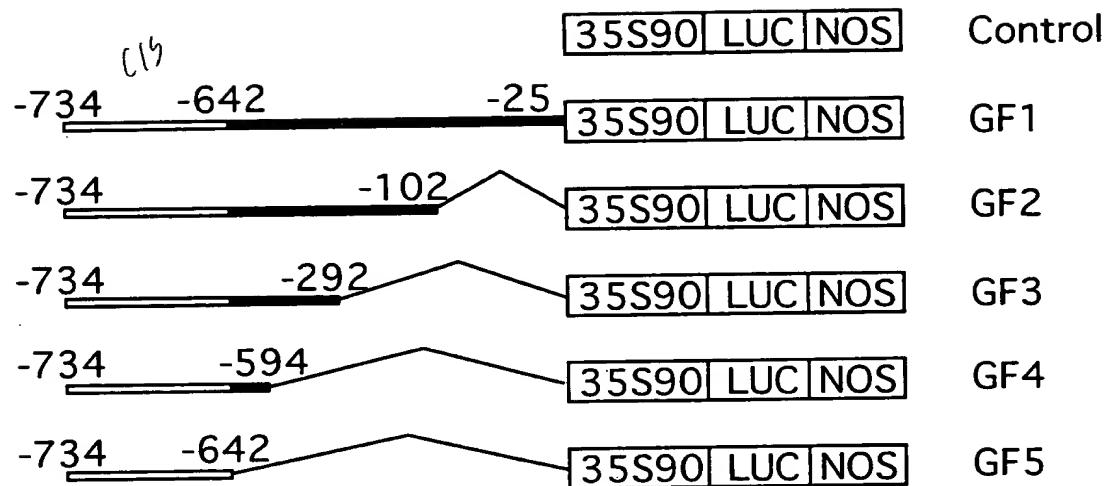


Fig. 4

a)



b)

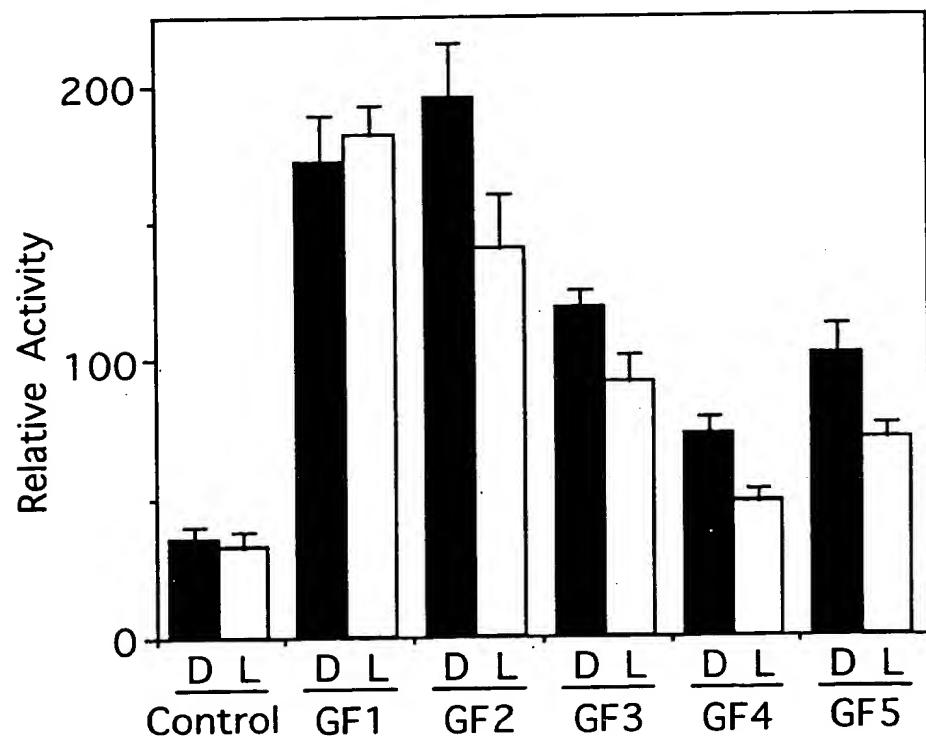


Fig. 5

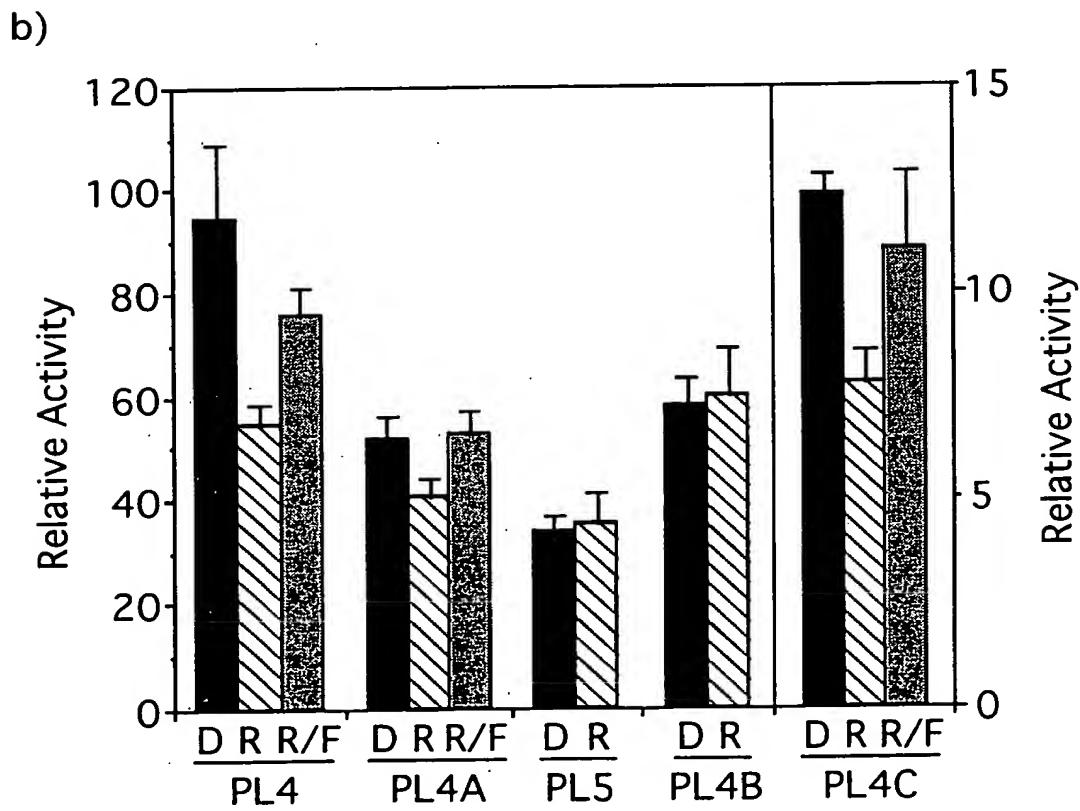
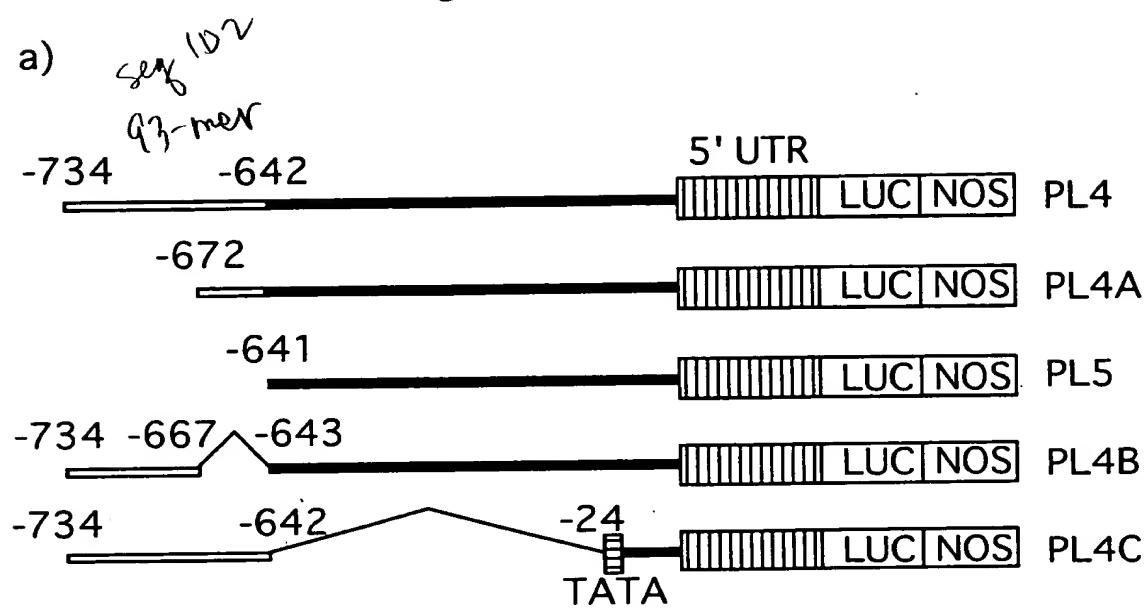


Fig. 6

a)

-672                    12bp element                    -642

**GTCTGAGGATTACAGTAATAAGAAAGA** WT

cTgcagGGATTACAGTAATAAGAAAGA LS1

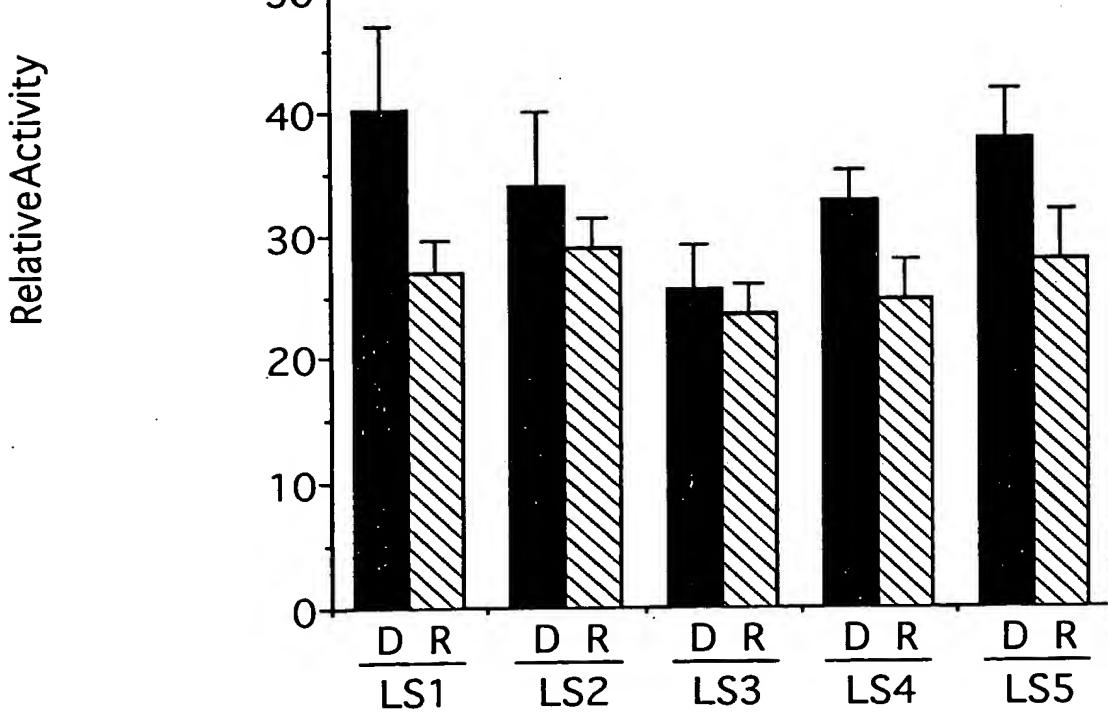
GTCTGAcgcagTACAGTAATAAGAAAGA LS2

GTCTGAGGATTcgcagATAAAAGAAAGA LS3

GTCTGAGGATTACAGTcgcAgGAAAGA LS4

GTCTGAGGATTACAGTAATAAAActgcaGA LS5

b)



09/700187

Fig. 7

a)

-672      12 bp element      -642

WT      GTCTGAGGATTTACAGTAATAAAGAACGA  
       \*\*\*\*\*  
       CAGACTCCTAAAATGTCATTATTCCTTGCT

MT      GTCTGAGGcTTTcCcGTAAATAAAGAACGA  
       \*\*\*\*\* \* \* \*\*\*\*\*  
       CAGACTCCgAAAAgGgCATTATTCCTTGCT

DRAFT - NOT FOR CITATION

b)

	Competitor				WT	MT				
	(fold)				50	50	50	50	200	400
	Nuclear Extract				D	L	D	L	D	L



Lane No. 1 2 3 4 5 6 7 8 9

09/700187

Fig. 8

a)



pGF9

pGF9M

b)

